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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,518	09/28/2001	Paul M. Petersen	042390.P11919	4755

8791 7590 05/19/2005

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER
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WOOD, WILLIAM H

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/966,518

Applicant(s)

PETERSEN ET AL.

Examiner

William H. Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claims 1-30 are pending and have been examined.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by  
**Poulsen et al. (USPN 5,812,852).**

#### **Claim 1**

**Poulsen** disclosed a method comprising:

receiving a first source code having a number of global storage objects, wherein the number of global storage objects are to be accessed by a number of threads during execution (*figure 1, element 100; column 4, lines 62-67*); and

translating the first source code into a second source code (*figure 1, element 120; column 4, line 67 to column 5, line 6*), wherein the translating includes adding initialization logic for each of the number of global storage objects (*column 5, lines 11-20, note new objects and library calls*), the initialization logic to include the following:

generating private copies of each of the number of global storage objects during execution of the second source code (*column 5, lines 11-20*); and

generating at least one cache object during the execution of the second source code, wherein the private copies of each of the number of global storage objects are accessed through the at least one cache object during execution of the second source code (*column 5, lines 11-14*).

Claim 2

**Poulsen** disclosed the method of claim 1, wherein the at least one cache object includes a number of pointers, wherein each of the pointers points to a private copy of a global storage object for a thread (*column 11, lines 30-40*).

Claim 3

**Poulsen** did not explicitly state the method of claim 1, wherein a private copy of a global storage object for a thread is accessed through the at least one cache object, independent of a run time library, after the private copy has been generated (*column 10, lines 38-44; column 11, lines 30-40; column 13, lines 22-26*).

Claim 4

**Poulsen** disclosed the method of claim 4, wherein the private copy of the global storage object for the thread is generated through execution of a routine of the run time library (*figure 1, element 140; column 9, lines 5-19*).

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Claim 5

**Poulsen** disclosed the method of claim 1, wherein the private copy of the global storage object for the thread is generated through execution of the second source code, independent of the run time library (*column 13, lines 22-26*).

Claim 6

**Poulsen** disclosed the method of claim 1, wherein the first source code and the second source code can be executed across at least two different platforms (*column 4, lines 56-61*).

Claim 7

**Poulsen** disclosed the method of claim 1, wherein the first source code and the second source code can be in at least two different programming languages (*column 12, lines 62-64*).

Claim 8

**Poulsen** disclosed the method of claim 1, wherein the second source code is to execute in a multi-processing shared memory environment (*column 6, lines 35-64*).

Claim 9

**Poulsen** disclosed the method of claim 1, wherein generating the at least one cache object during the execution of the second source code comprises creating the at least

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one cache object through an invocation of a routine within a run time library upon determining that the at least one cache object has not been generated (*column 7, lines 22-39; column 9, lines 5-19; column 10, lines 38-44*).

Claim 10

**Poulsen** disclosed the method of claim 9, wherein the initialization logic comprises receiving a pointer to the at least one cache object and the pointer to the private copy of the global storage object for the thread from the routine within the run time library (*column 10, lines 38-44; column 11, lines 30-40*).

Claim 11

The limitations of claim 11 are substantially the same as the limitations of claims 1, 4 and 5 and therefore, claim 11 is rejected in the same manner as claims 1, 4 and 5.

Claim 12

**Poulsen** disclosed the method of claim 11, wherein the at least one cache object is stored in a software cache for the number of program units during execution of the translated program units (*column 11, lines 30-40*).

Claim 13

The limitations of claim 13 are substantially the same as the limitations of claim 2 therefore, claim 13 is rejected in the same manner as claim 2.

Claim 14

The limitations of claim 14 are substantially the same as the limitations of claim 10 and therefore, claim 14 is rejected in the same manner as claim 10.

Claim 15

The limitations of claim 15 are substantially the same as the limitations of claim 6 and therefore, claim 15 is rejected in the same manner as claim 6.

Claim 16

The limitations of claim 16 are substantially the same as the limitations of claim 7 and therefore, claim 16 is rejected in the same manner as claim 7.

Claim 17

The limitations of claim 17 are substantially the same as the limitations of claims 1-10 and therefore, claim 17 is rejected in the same manner as claims 1-10. **Poulsen** disclosed a compiler unit coupled to the translation unit, the compiler unit to receive the number of translated program units and to generate the object code based on the number of translated program units (*column 5, lines 21-35*).

Claim 18

The limitations of claim 18 are substantially the same as the limitations of claim 8 and therefore, claim 18 is rejected in the same manner as claim 8.

Claim 19

The limitations of claim 19 are substantially the same as the limitations of claim 6 and therefore, claim 19 is rejected in the same manner as claim 6.

Claims 20-26

The limitations of claims 20-26 are substantially the same as the limitations of claims 1-5 and 9-10 and therefore, claims 20-26 are rejected in the same manner as claims 1-5 and 9-10.

Claims 27-30

The limitations of claim 27-30 are substantially the same as the limitations of claims 11-14 and therefore, claim 27-30 is rejected in the same manner as claims 11-14.

***Response to Arguments***

3. Applicant's arguments filed 17 March 2005 have been fully considered but they are not persuasive. Applicant argued **Poulsen** does not disclose *generating at least one cache object during the execution of the second source code, wherein the private copies of each of the number of global storage objects are accessed through the at*



*least one cache object during execution of the second source code.* Upon review of the cited prior art and the claimed invention, the arguments are respectfully found unpersuasive. First, Applicant's comments regarding a runtime library (Remarks, page 9, last paragraph) seem to be in contradiction to claims 3 and 4. Second, whether or not privatized objects may or may not be encapsulated in a structure does not clearly relate to the above cited claim language. Finally, regarding the above claim language refer as well to **Poulsen**: column 10, lines 38-44; column 11, lines 30-40; and column 13, lines 22-26, which further illustrate the use of accessing of individualized copies through a collection of pointers.

#### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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**Correspondence Information**

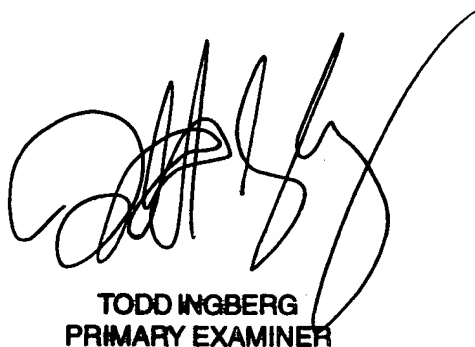
Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (571)-272-3736. The examiner can normally be reached 9:00am - 5:30pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)-272-3719. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.



William H. Wood  
May 4, 2005



**TODD INGBERG**  
**PRIMARY EXAMINER**